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Book Reviews

THE ORIGINS AND PAST OF MODERN HUMANS—TOWARDS RECONCILIATION (Recent Advances in Human Biology, Volume 3). Edited by Keiichi Omoto and Phillip V. Tobias. Singapore: World Scientific. 1998. 267 pp. ISBN 981-02-3203-9. $76.00 (cloth).

This volume reports papers originally presented in a workshop held at the Institute for Advanced Studies in Kyoto, Japan, March 21–24, 1996. Organization of this workshop centered on attempting resolution of current questions regarding the highly controversial issue of modern human origins. While a single outcome did not result, and more questions were perhaps raised than answered, this volume is still valuable because of the intentional inclusion of scholars from a variety of different disciplines—genetics, paleontology, archaeology, and linguistics. As is most often the case with edited volumes, the nature of individual papers varies greatly, ranging from attempts at broad synthesis to specific case studies.

The book consists of 16 papers in four major sections, along with some concluding remarks by Omoto. The first section includes six papers focusing on genetic data. Many of these results have been published elsewhere in somewhat different form. Deka and colleagues examine a number of microsatellite loci using phylogenetic analysis, concluding that patterns of variation support a recent African origin model. Harding and her colleagues present some of her work on β-globin gene trees, reaching a different conclusion and arguing that the genetic data support a multiregional interpretation with ancient African and Asian ancestry. Takahata and Klein examine models of population diversity and support an African origin model. Their paper is important because it raises the question of the possible genetic impact of extinction and recolonization of local populations. While I do not necessarily agree with their conclusions, I think this is an important area that must continue to be addressed.

With the exception of Harding's paper, a reader would conclude that the genetic evidence favors a recent African origin. I do not disagree that much of the genetic data are compatible with a recent African origin. The problem, however, is that the same data can also be explained by one or more multiregional interpretations (Relethford, 1998). Compatibility is not proof unless all alternative hypotheses are incompatible with the data. I would have liked to see more detailed discussion along these lines.

The remaining two genetics papers focus on hypotheses of the origin of specific Asian populations. Horai and Omoto address hypotheses of the origin of the Japanese. Based on their analysis of mtDNA polymorphisms they support a "hybridization model" where modern Japanese populations reflect past mixture of Jomon and Yayoi populations. Tokunaga and colleagues focus their analysis of HLA haplotypes on the genetic affinities of the Ainu. Among their findings is the suggestion that the Ainu are the descendants of northeastern Asian populations that also gave rise to Native American populations.

Part 2 consists of four papers focusing on the fossil record. Wolpoff questions the designation of "modern" humans, noting the difficulty in deriving a definition that includes all living humans. He also describes briefly multiregional interpretations of the genetic data. Bräuer and Broeg examine the morphology of the Mladeč remains and several other fossils from the Czech Republic, concluding that there is no evidence for regional continuity in this part of Europe. Rightmire reviews the fossil evidence for early modern humans from South Africa and the Levant, arguing that the fossil hominids from Klasies and Skhul/Qafzeh provide the most ancient evidence to date of modern morphological characteristics. Wu examines morphological relationships between archaic and modern hominid remains in East Asia and Africa, noting evidence for East Asian continuity.

Part 3 consists of four papers on archaeology. Pope reviews the archaeological evidence from the site of Xiachangliang, the

only open-air lake site in Lower Paleolithic East Asia. Based on chronology and archaeology, he concludes that the data do not support any model of long-term biological or cultural isolation of *Homo erectus*. Miracle examines archaeological evidence for the spread of modernity in Europe, testing the hypothesis that the transition from archaic to modern Europeans was due to an influx of modern humans with a different technology. He concludes that this hypothesis is not supported, and that the Aurignacian is not a single culture uniquely associated with modern humans. Bellwood examines the ways in which archaeological data can contribute to an understanding of population history by using examples from Australia and Oceania. A major emphasis of this paper is examining evidence for and against rapid dispersal models. The final paper in this section, by Aoki, outlines a complex mathematical model for population movements into Europe, finding that replacement is likely under certain scenarios, but not under others.

The final section of this book presents two papers on linguistic variation and evolution. Ruhlen describes recent work on a new linguistic family, Dene-Caucasian, which includes groups previously considered as isolates, such as the Basque. Ruhlen proposes that the reconstructed linguistic history of this language family fits a recent African origin model better than a multiregional model. Wang reviews various ways in which linguistic analysis can shed light on human evolution, concluding that a multiregional model is more likely.

It should be clear from my brief synopses that the participants varied greatly in their relative support of replacement versus continuity models, even within disciplines. There was no uniform support for one model versus another. Nonetheless, the book is interesting because of the variety of approaches to similar questions of origins. I feel it is increasingly important for geneticists to become more familiar with the fossil record, and for paleoanthropologists to become familiar with the genetic evidence. Further, both disciplines need to become more familiar with evidence from archaeology and linguistics. Conferences such as these are a necessary first step to overcome hyperspecialization and limited communication across fields. As such, the book will be useful to researchers who have not come across previously published works by the participants. The major value of this book is the need to continue to view the modern human origins debate as an *anthropological* question, requiring more attention to contributions across all disciplines and the need to communicate findings in broad and widely read anthropological journals and books. Hyperspecialization in research and publication is not as productive for further efforts to deal holistically with these questions. We would do well to continue the efforts started in this book.

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LITERATURE CITED

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SEX AND GENDER IN PALEOPATHOLOGICAL PERSPECTIVE. Edited by Anne L. Grauer and Patricia Stuart-Macadam. 1998. Cambridge, United Kingdom: Cambridge University Press. 1992. 192 pp. ISBN 0-521-62090-2. $54.95 (cloth).

This slim book is full of thought-provoking papers that underscore the problems and promise of exploring the complex relationships between sex differences in human physiology, cultural practices, and health in modern and ancient societies. It is a significant contribution to the rapidly growing literature that views sex differences in health from a biocultural perspective. The loosely related set of papers that have been brought together in this volume make it clear how crucial it is to adopt an integrative approach in research on gender differences in health.